This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-21(Withdrawn)

22. (Currently Amended)   A wireless packet communications system for controlling media access in a wireless telecommunications network, comprising:

[a plurality of wireless stations; and]

a plurality of base stations connected to [a] the telecommunications network, each base station configured for transmitting a paging message to a wireless station of [the] a plurality of wireless stations associated with the base station when the base station receives a data packet for downlink transmission to the wireless station, the base station further configured for transmitting a pilot frequency signal corresponding to a downlink traffic channel when the base station transmits the data packet to the wireless station using the downlink traffic channel, and the pilot frequency signal being one of a plurality of pilot frequency signals respectively corresponding to the downlink traffic channels;

the base station further configured to receive a list of preferred traffic channels generated by the wireless station based on detected levels of the pilot frequency signals at the wireless station

[the wireless station detecting a level of a plurality of the pilot signals in response to receiving the paging message, generating a list of preferred traffic channels based on detected levels of the pilot frequency signals].

23. (Cancelled)

24. (Original)   The system according to claim 22 [23], wherein the base station assigns the downlink traffic channel for downlink transmitting the received data packet to the wireless station based on the list of preferred traffic channels.

25. (Original)   The system according to claim 24, wherein the base station transmits the assigned downlink traffic channel to the wireless station, transmits the data packet to the wireless station using the assigned downlink traffic channel, and transmits the pilot frequency signal corresponding to the assigned downlink traffic channel.

26. (Cancelled)

27. (Currently Amended)   The system according to claim 25 [26], wherein the base station generates a preferred traffic channel priority order list for all wireless stations communicating with the base station, and updat[ing]es the preferred traffic channel priority order list based on the list of preferred traffic channels transmitted to the base station.

28. (Original)   The system according to claim 25, wherein each downlink traffic channel includes a timeslot and a traffic carrier frequency.

29. (Currently Amended)   The system according to claim 28, wherein the base station transmits the paging message during a first predetermined timeslot of a frame having a plurality of timeslots, and

[wherein the wireless station transmits] receives the list of preferred traffic channels from the wireless station during a second predetermined timeslot of the frame.

30. (Original)   The system according to claim 29, wherein the frame is one of a predetermined number of frames in a superframe,

wherein the plurality of base stations are grouped into the predetermined number of groups, each group of base stations being associated with a frame of the superframe, and

wherein the base stations of a group of base stations transmit paging messages during the frame associated with the group when a base station of the group has a data packet for downlink transmission for a wireless station.

31. (Original)   The system according to claim 30, wherein the base stations of each group of base stations are geographically separated from other base stations of the group for minimizing co-channel interference between base stations of the group.

32. (Cancelled)

33. (Cancelled)

34. (Currently Amended) A wireless station comprising:

          a receiver <u>for</u> receiving a paging message, the paging message indicating that a data packet is pending for downlink transmission to the wireless station;

          a pilot frequency signal scanner <u>for</u> scanning a pilot frequency band in response to the paging message for determining whether any downlink channels are available for downlink [transmitting] <u>transmission of</u> the data packet to the wireless station, the pilot frequency band having pilot frequency signals, each pilot frequency signal corresponding to a downlink channel; and

          a transmitter <u>for</u> transmitting a message indicating available downlink channels for downlink [transmitting] <u>transmission of</u> the data packet.

35. (Currently Amended) The wireless station according to claim 34, further comprising a channel selection processor <u>for</u> selecting available downlink channels based on detected levels of pilot frequency signals.

36. (Original)   The wireless station according to claim 35, wherein the pilot frequency signal scanner uses a fast Fourier transform for scanning the pilot frequency band.

37. (Original)   The wireless station according to claim 36, wherein the receiver further receives an assignment message, the assignment containing a downlink channel assignment in which the data packet will be downlink transmitted.

38. (Original)   The wireless station according to claim 37, wherein the channel selection processor selects available downlink channels further based on a priority ordering of selected downlink channels.

39. (Original)   The wireless station according to claim 38, wherein the paging message further includes information relating to a priority ordering of downlink channels for the wireless station.

40. (Currently Amended) A base station comprising:

a transmitter for transmitting a paging message to a wireless station when a data packet is pending for downlink transmission from the base station to the wireless station, the paging message including information relating to the data packet pending for downlink transmission; and

a receiver for receiving a list of preferred traffic channels for the wireless station for downlink transmission of the data packet.

41. (Currently Amended) The base station according to claim 40, further comprising an assignment message assembler for generating an assignment message based on the list of preferred traffic channels, the assignment message including information relating to a downlink traffic channel assigned to the wireless station for downlink [transmitting] transmission of the data packet to the wireless station, and

wherein the transmitter transmits the assignment message to the wireless station.

42. (Original)   The base station according to claim 41, wherein the transmitter downlink transmits the data packet to the wireless station using the assigned downlink traffic channel.

43. (Original)   The base station according to claim 42, wherein the transmitter transmits a pilot frequency signal when the data packet is downlink transmitted to the mobile station, the pilot frequency signal corresponding to the assigned downlink traffic channel.

44. (Original)   The base station according to claim 43, wherein the wireless station is a mobile station.

45. (Original)   The base station according to claim 43, wherein the wireless station is a fixed station.

46. (Original)   The base station according to claim 43, wherein the wireless station is one of a plurality of wireless stations communicating with the base station,

wherein the paging message includes information for each mobile station of the plurality of mobile stations having a data packet pending for downlink transmission from the base station, and

wherein the receiver receives a list of preferred traffic channels from each wireless station having a pending data packet.

47. (Original)   The base station according to claim 46, wherein the assignment message assembler generates the assignment message based on all lists of preferred traffic channels received from mobile stations having a pending data packet, the assignment message including information relating to a downlink traffic channel assigned to each respective wireless station having a pending data packet, and

wherein the transmitter transmits the assignment message to the mobile stations having a pending data packet.

48. (Original)   The base station according to claim 47, wherein the transmitter transmits each respective data packet using the downlink traffic channel assigned to the mobile station for which the data packet is pending and transmits a pilot frequency signal corresponding to each assigned downlink traffic channel used for downlink transmitting each respective pending data packet.

49. (Original)   The base station according to claim 48, further comprising a channel list buffer storing a preferred traffic channel priority order list for the plurality of wireless stations, the channel list buffer updating the preferred traffic channel priority

order list based on all lists of preferred traffic channels received from the mobile stations having a pending data packet.

50. (Original)   The base station according to claim 49, wherein each downlink traffic channel includes a timeslot and a traffic carrier frequency.

51. (Original)   The base station according to claim 50, wherein the transmitter transmits the paging message during a first predetermined timeslot of a frame having a plurality of timeslots, and

wherein the receiver receives the list of preferred traffic channels during a second predetermined timeslot of the frame.

52. (Original)   The base station according to claim 51,

wherein the frame is one of a predetermined number of frames in a superframe,

wherein the base station is one of a plurality of base stations being grouped into the predetermined number of groups, each group of base stations being associated with a frame of the superframe, and

wherein the transmitter of each respective base station transmits the paging message during the frame associated with the group.

53. (Original)   The base station according to claim 52, wherein the base stations of each group of base stations are geographically separated from other base stations of the group for minimizing co-channel interference between base stations of the group.